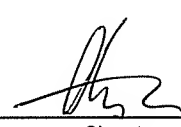
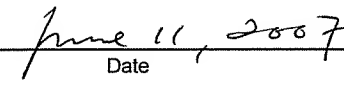
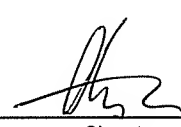
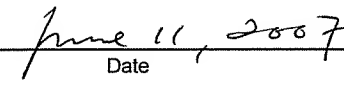
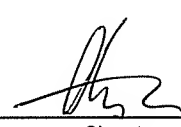
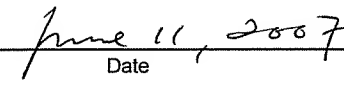


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<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional)  08891912US1							
<p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]</p> <p>on _____</p> <p>Signature _____</p> <p>Typed or printed name _____</p>		<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 50%; padding: 5px;">Application Number  09/893,493</td><td style="width: 50%; padding: 5px;">Filed  06/29/2001</td></tr><tr><td colspan="2" style="padding: 5px;">First Named Inventor  Graves, Alan F.</td></tr><tr><td style="padding: 5px;">Art Unit 2613</td><td style="padding: 5px;">Examiner Bello, Augustin</td></tr></table>		Application Number  09/893,493	Filed  06/29/2001	First Named Inventor  Graves, Alan F.		Art Unit 2613	Examiner Bello, Augustin
Application Number  09/893,493	Filed  06/29/2001								
First Named Inventor  Graves, Alan F.									
Art Unit 2613	Examiner Bello, Augustin								
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p>  <p>This request is being filed with a notice of appeal.</p>  <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p>  <table style="width: 100%;"><tr><td style="width: 50%; vertical-align: top; padding: 5px;"><p>I am the</p><p><input type="checkbox"/> applicant/inventor.</p><p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p><p><input type="checkbox"/> attorney or agent of record. Registration number _____</p><p><input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 <u>57,089</u></p></td><td style="width: 50%; vertical-align: top; padding: 5px;"><div style="text-align: center;"> _____ Signature</div><div style="text-align: center;"><u>Xiang Lu</u> _____ Typed or printed name</div><div style="text-align: center;"><u>(613) 786-8680</u> _____ Telephone number</div><div style="text-align: center;"> _____ Date</div></td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>				<p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input type="checkbox"/> attorney or agent of record. Registration number _____</p> <p><input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 <u>57,089</u></p>	<div style="text-align: center;"> _____ Signature</div> <div style="text-align: center;"><u>Xiang Lu</u> _____ Typed or printed name</div> <div style="text-align: center;"><u>(613) 786-8680</u> _____ Telephone number</div> <div style="text-align: center;"> _____ Date</div>				
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<p><input type="checkbox"/> *Total of _____ forms are submitted.</p>									

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: **Graves, Alan F.; Cunningham, Ian M.; Stark, Ryan; Felske, Kent E.; Hobbs, Chris; Watkins, John H.**

Serial No. : 09/893,493                      Group Art Unit : 2613  
Filed : 06/29/2001                      Examiner : Bello, Augustin  
For : Communications Network For a Metropolitan Area  
Date : June 11, 2007                      Docket No. : 08891912US1

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**Mail Stop: AF**

The Honorable Commissioner of Patents and Trademarks,  
P.O. Box 1450  
ALEXANDRIA, VIRGINIA 22313-1450  
UNITED STATES OF AMERICA

**Pre-Appeal Brief Request For Review**

Sir:

Pursuant to 1296 Off. Gaz. 2 (July 12, 2005), Applicant requests review of the rejection of claims 1-26 in the above-identified application. No amendments are being filed with this Request. This Request is being filed with a Notice of Appeal.

Arguments begin on page 2 of this paper.

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### **Arguments**

Claims 1 to 26 are pending in this case. Claims 1 to 26 were rejected under 35 U.S.C. 103 (a) as being unpatentable over Hugenberg (U.S. Patent No. 6,714,545), hereinafter referred to as Hugenberg, in view of Hung (US Patent No. 6,583,901), hereinafter referred to as Hung.

Applicants respectfully submit that the rejection of Applicants' claims in the Office Action mailed February 22, 2007, hereinafter referred to as Office Action, is improper and without basis. Applicants provided arguments in Response to an Office Action, filed on August 16, 2006, 2006, hereinafter referred to as R1; and in Response to the second Final Office Action, filed on February 5, 2007, hereinafter referred to as R2, as to why Hugenberg and Hung, alone or in combination does not teach or suggest the claimed invention. Relevant arguments were also provided in Response to the first Final Office Action, filed on February 17, 2006, hereinafter referred to as R3.

#### **Characteristics of the sparse DWDM and the photonic switch**

The advantages of the mapping multiple sparse DWDM (S-DWDM) into DWDM, the characteristics of the S-DWDM and the characteristics of the photonic switch of the presently claimed invention have been discussed in R1, R2 and R3. In particular, in R1 and R3, examples in the specification as original filed were given to illustrate those advantages and characteristics.

#### **Hugenberg does not teach or suggest S-DWDM and photonic switch**

The Examiner admitted that Hugenberg failed to teach S-DWDM in Office Action.

The Examiner alleged that the reference numeral 40 in Figure 2 of Hugenberg is a photonic switch.

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Applicants stated and reiterated in R1, R2 and R3 that the photonic switch of the present invention is an all-optical switch operating in optical domain, without O-E-O conversion.

Applicants provided evidence in R1 that the reference numeral 40 in Figure 2 of Hugenberg is a router and aggregation device, and is not a photonic switch. Hugenberg clearly indicated electrical operations within the router and aggregation device 40, for example, at column 4, line 48 to column 5, line 15.

Hung does not teach or suggest S-DWDM

The Examiner stated in the Office Action that column 7 line 64 to column 8 line 2; column 9, lines 2-6; and column 17 lines 45 to column 18, line 10 of Hung teaches “wavelengths which have an optical precision which are clearly capable of being interleaved into the optical frequency constraints of a DWDM wavelength plan of the core network.”

As Applicants noted in R1 and R2, this interpretation is not correct.

Hung, as cited by the Examiner teaches reduction of the spectral width of the optical signal from the DFB lasers, and multiplexing of wavelengths, not interleaving of S-DWDM, as claimed by the present invention. Multiplexing of wavelengths through a multiplexer is known in the art. Interleaving S-DWDM through a photonic switch, as described and claimed in the present invention is novel and inventive.

Applicants noted in R1 that Hung did not even use the term “interleave”.

The Examiner was silent on this point in the Office Action.

Hung teaches away from S-DWDM

Applicants noted in R1, Hung actually teaches away from the present invention by stating “system control unit 1360 selects an idle channel to achieve maximum

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isolation with used channels, i.e., the channel is selected to have the maximum separation from channels in use." (column 9, lines 3 to 6).

The Examiner was silent on this point in the Office Action.

Conclusion

The arguments presented herein are for the purpose of panel review of clear errors in the rejections, and thus Applicant reserves the right to present additional arguments not expressly presented or discussed herein.

For at least the foregoing reasons, Applicant submits that the rejections of claims 1-26 are improper and without basis. Accordingly, Applicant respectfully requests that the panel issue a written decision withdrawing the rejection of claims 1-26.

Respectfully Submitted,

/Xiang Lu/

Xiang Lu  
Registration No. 57,089

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